



Northern Gold NL

ACN: 009 620 937
Lot 128 Finlay Rd, ADELAIDE RIVER, N.T. 0846
Phone: 08 89767023 Fax: 08 89767025

EL 9107 FINAL REPORT

14th July 1997
Ranford Hill and Katherine
1:100,000 Map Sheets

Title Holder:- Territory Goldfields N.L.
Managed by:- Northern Gold N.L.

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Author:- L. Cahir

NTDME

Northern Gold N.L., Adelaide River

Northern Gold N.L., Perth Office

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Figure 1 Tenement Location Diagram

1.0 SUMMARY

EL 9107 is located approximately 30 kilometres east of Pine Creek in the Wandie area and consists of 1 graticular block, 3 square kilometres in area.

The area is located east of the Pine Creek Shear Zone and is dominated by Lower Proterozoic Burrell Creek Formation sediments.

The licence was granted to Dominion Gold Operations Pty. Ltd., on the 25th of July 1995 for a period of 3 years. EL 9107 is held by Territory Goldfields N.L., and managed by Northern Gold N.L.

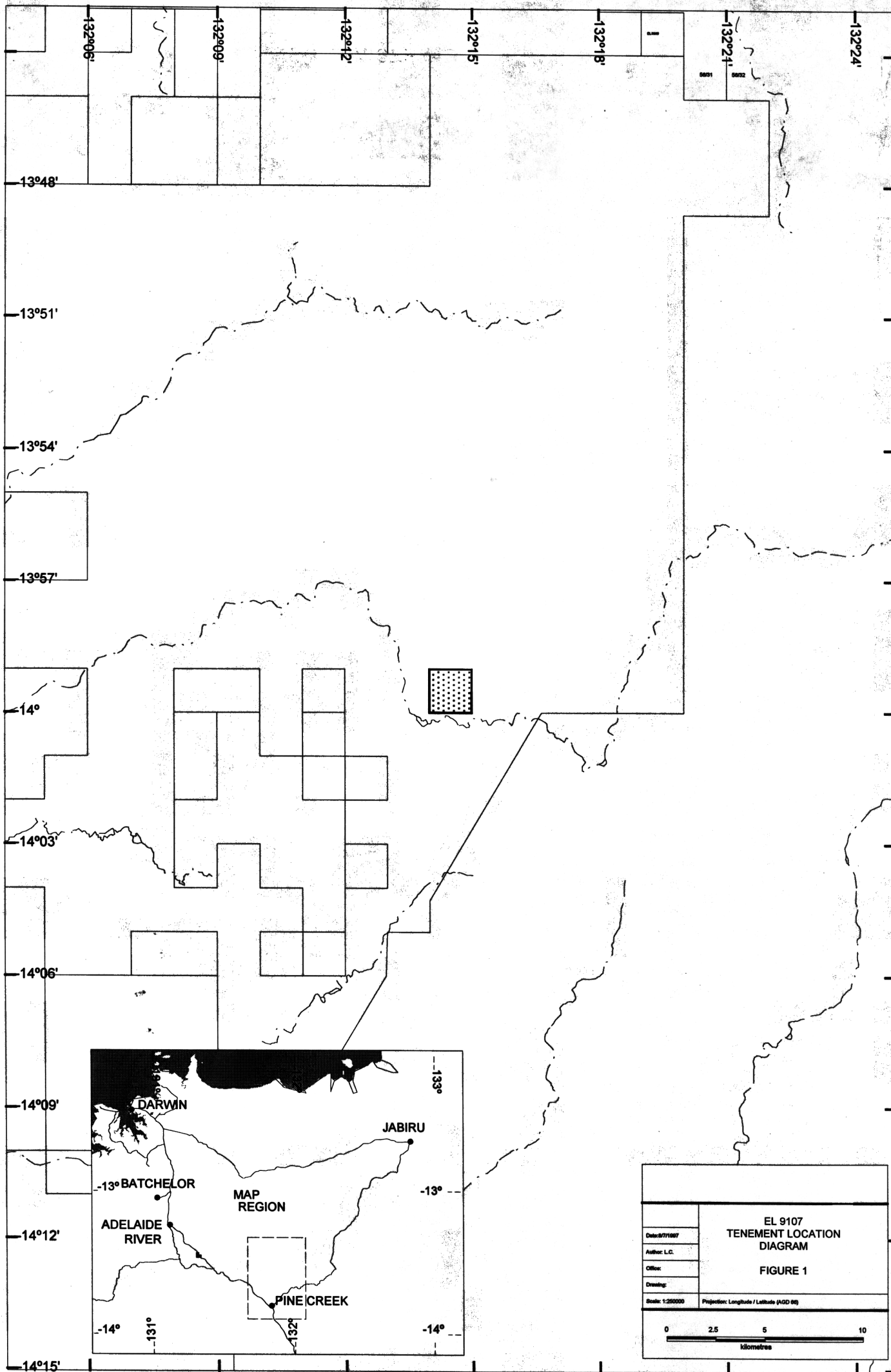
Northern Gold N.L. completed a work program based on digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of exploration to be used on the licence.

2.0 LOCATION AND TENURE

EL 9107 is located approximately 220 kilometres south - east of Darwin and 30 kilometres east of Pine Creek. The tenement, which consists of 1 graticular block, 3 square kilometres in area, is situated on the Ranford Hill and Katherine 1:100,000 scale geological and topographical sheets (5370,5369) and the Wandie 1:50,000 scale (15/4-III) map sheet (Figure 1). EL 9107 lies between latitudes 13°59' south and 14°00' south and longitudes 132°14' east and 132°15' east within NT Portion 4362, held by the Barnjarn Aboriginal Corporation.

Access is via the Stuart Highway to Pine Creek, then via the Kakadu Highway and station tracks.

The licence was granted to Dominion Gold Operations Pty. Ltd. on the 25th of July 1995 for a period of 3 years. The licence is held by Territory Goldfields N.L., which is now managed by Northern Gold N.L.



| | |
|---|---|
| EL 9107 TENEMENT LOCATION DIAGRAM | |
| FIGURE 1 | |
| Date: 5/11/07 | |
| Author: L.C. | |
| Officer: | |
| Drawing: | |
| Scale: 1:250000 | Projection: Longitude / Latitude (AGD 86) |

3.0 GEOLOGY

3.1 Regional Geology

EL 9107 is situated within the Pine Creek Geosyncline, a tightly to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All the lithologies in the area have been metamorphosed to low, and in places, medium grade, metamorphic assemblages. For the purpose of this report, the prefix 'meta-' is implied, but omitted from the rock names and descriptions.

The sequence has been intruded by pre-orogenic dolerite sills of the Zamu Dolerite and a large number of late syn-orogenic to post-orogenic Proterozoic granitoids. Largely undeformed Middle and Late Proterozoic, Palaeozoic and Mesozoic strata, as well as Cainozoic sediments and laterites, overly the Pine Creek Geosyncline.

3.2 Local Geology

The geology of the tenement area is dominated by rocks of the Burrell Creek Formation. The formation is dominated by greywacke and siltstone/shale and crops out extensively throughout the area, on lightly timbered rubble strewn rises and low strike ridges. To the south of the licence, north - east to south - west trending folded structures are present (Socic 1996).

The Wandie Granite intrudes the region to the north of EL 9107.

4.0 PREVIOUS EXPLORATION

The area reveals a rich history of mining beginning with the mining of gold at the Wandie Goldfield in 1895. Other metals mined in the area include copper, lead and tin.

During recent years exploration has been carried out by numerous companies including:-

- Moline Management
- Cyprus Gold Aust. Corporation
- Geopeko Ltd.
- Lachlan Resources
- Zapopan N.L.
- Arimco N.L.
- Billiton Aust.
- Aardeau Mining
- RGC Exploration Pty. Ltd.
- Newcrest Mining Ltd.

Dominion Gold Operations Pty. Ltd completed LAG sampling, geological mapping, angled RAB drilling and rock chip sampling. The exploration carried out in the area was completed over EL 7988, which covered EL 9107.

Rock chip samples were collected in areas of old workings and general areas of interest. A total of 56 samples were collected and submitted to Amdel, Darwin, for analysis of Au, Cu, Pb, Zn, Ag, Bi and As. Gold results of up to 19.0g/t Au were received from the Last Hope sub-prospect area (Fawcett, 1995).

A total of 295 LAG samples were collected on a nominal 800 metre by 200 metre pattern from suitable areas not previously sampled.

LAG sampling involved the collection of approximately 2 kilograms of +2 millimetre to -6 millimetre size material lying on the surface. This was achieved by using a wide, heavy duty broom to sweep up surface material which was then sieved in the field to obtain the correct size fraction (Fawcett, 1995).

All samples were submitted to Amdel, Darwin, for low level gold analysis (1ppb detection limit) by AAS process. Samples were also analysed for As and Bi. Gold results were generally weak. One anomalous assay of 37 ppb Au and 1450 ppm As occurs in the Fergusson River subproject area (Fawcett, 1995).

Angled RAB drilling was completed at Australus and Saunders Rush. Drilling was carried out by Thompson Drilling (Pine Creek) using a multi-purpose GK850 track mounted rig.

A total of 93 holes for 3,350 metres and 363 samples, were completed. Samples were dumped on the ground in 1 metre piles and composited to 10 metre samples. All samples were submitted to Amdel, Darwin, for analysis of Au, As and Bi (Fawcett, 1995).

5.0 EXPLORATION COMPLETED

5.1 GIS and Remote Sensing Studies

Northern Gold N.L. completed a work program based on digital data acquisition and manipulation. Landsat Imagery, SPOT Imagery and AGSO mapping were obtained and used in conjunction with aerial mapping to determine the best method of exploration to be used on the licence.

GIS and satellite imagery were used to log soil types, indicating that the region comprises mainly lateritised lower saprolite. (Socic 1996)

Interpretation of the GIS and remote sensing imagery shows that the area is dominated by subcropping Burrell Creek Formation sediments. These sediments have been contact metamorphosed to the north - east of the tenement by the Wandie Granite. Within the hornfelsed aureole adjacent to the granitoid, the Burrell Creek Formation forms prominent ridges ranging up to 200 metres high.

7.0 REFERENCES

FAWCETT, C., (1995). EL7988 - Wandie Annual Report, Year Two of Tenure, 16 July 1994 to 15 July 1995. Unpublished report by Territory Goldfields N.L. to the NTDME.

SOCIC. N., (1996) EL 9107 Annual Report 25.07.95 to 24.07.96. Unpublished report by Northern Gold N.L. for the NTDME.